

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT
TRANSLATION

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		Date of mailing (day/month/year) 28.12.2004
Applicant's or agent's file reference P04083PCT		FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/JP2004/015244	International filing date (day/month/year) 15.10.2004	Priority date (day/month/year) 24.10.2003
International Patent Classification (IPC) or both national classification and IPC F16D48/02		
Applicant Komatsu Ltd.		

<p>1. This opinion contains indications relating to the following items:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application <p>2. FURTHER ACTION</p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further options, see Form PCT/ISA/220.</p> <p>3. For further details, see notes to Form PCT/ISA/220.</p>

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

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International application No.
PCT/JP2004/015244

Box No. I	Basis of this opinion
<p>1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).</p> <p>2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> in written format</p> <p><input type="checkbox"/> in computer readable form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input type="checkbox"/> filed together with the international application in computer readable form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p> <p>3. <input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p> <p>4. Additional comments:</p>	

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Box No. V		Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																								
<p>1. Statement</p> <table> <tr> <td align="center">Novelty (N)</td> <td align="center">Claims</td> <td align="center"><u>1-12</u></td> <td align="center">YES</td> </tr> <tr> <td></td> <td align="center">Claims</td> <td align="center"></td> <td align="center">NO</td> </tr> <tr> <td align="center">Inventive step (IS)</td> <td align="center">Claims</td> <td align="center"><u>7-9</u></td> <td align="center">YES</td> </tr> <tr> <td></td> <td align="center">Claims</td> <td align="center"><u>1-6, 10-12</u></td> <td align="center">NO</td> </tr> <tr> <td align="center">Industrial applicability (IA)</td> <td align="center">Claims</td> <td align="center"><u>1-12</u></td> <td align="center">YES</td> </tr> <tr> <td></td> <td align="center">Claims</td> <td align="center"></td> <td align="center">NO</td> </tr> </table> <p>2. Citations and explanations:</p> <p>Document 1: JP 2001-146928 A (Komatsu Manufacturing Co., Ltd.), 29 May 2001; entire text and all drawings & US 6405844 B1; entire text and all drawings</p> <p>Document 2: JP 7-1993 A (Caterpillar Inc.), 6 January 1995; column 6, lines 7-14, and fig. 3 & US 5380257 A; column 4, line 57 to column 5, line 4, and fig. 3 & EP 616918 A1</p> <p>Document 3: JP 4-50519 A (Isuzu Motor Ltd.), 19 February 1992; page 3, lower left column lines 6-8, and fig. 1</p> <p>Claims 1, 3-6 and 10-12</p> <p>The inventions set forth in claims 1, 3-6 and 10-12 do not involve an inventive step in the light of documents 1 and 2, cited in the international search report. A person skilled in the art could easily apply the technique disclosed in document 2 for controlling clutch transmission torque in accordance with engine revolution speed, in an engine power transmission device disclosed in document 1.</p> <p>Claim 2</p>			Novelty (N)	Claims	<u>1-12</u>	YES		Claims		NO	Inventive step (IS)	Claims	<u>7-9</u>	YES		Claims	<u>1-6, 10-12</u>	NO	Industrial applicability (IA)	Claims	<u>1-12</u>	YES		Claims		NO
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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The invention set forth in claim 2 does not involve an inventive step in the light of documents 1 to 3, cited in the international search report. A person skilled in the art could easily apply the technique disclosed in document 3 for controlling clutch transmission torque in accordance with engine revolution speed and the degree of slot opening, in an engine power transmission device disclosed in document 1.

Claims 7-9

The inventions set forth in claims 7 to 9 are not disclosed in any of the documents cited in the international search report, and are not obvious to a person skilled in the art.

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1. This opinion contains indications relating to the following items:

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2. **FURTHER ACTION**

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 - a. type of material
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